Fig.1

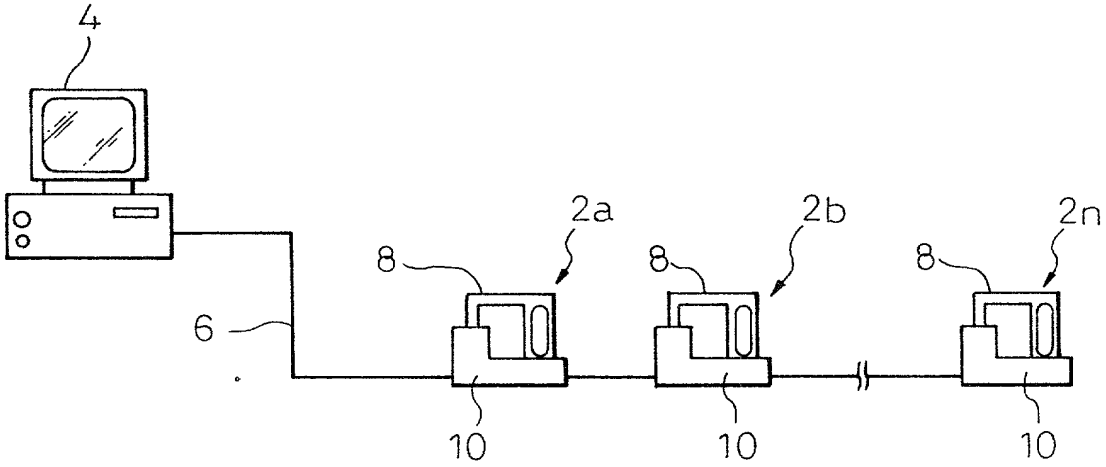

Fig.2

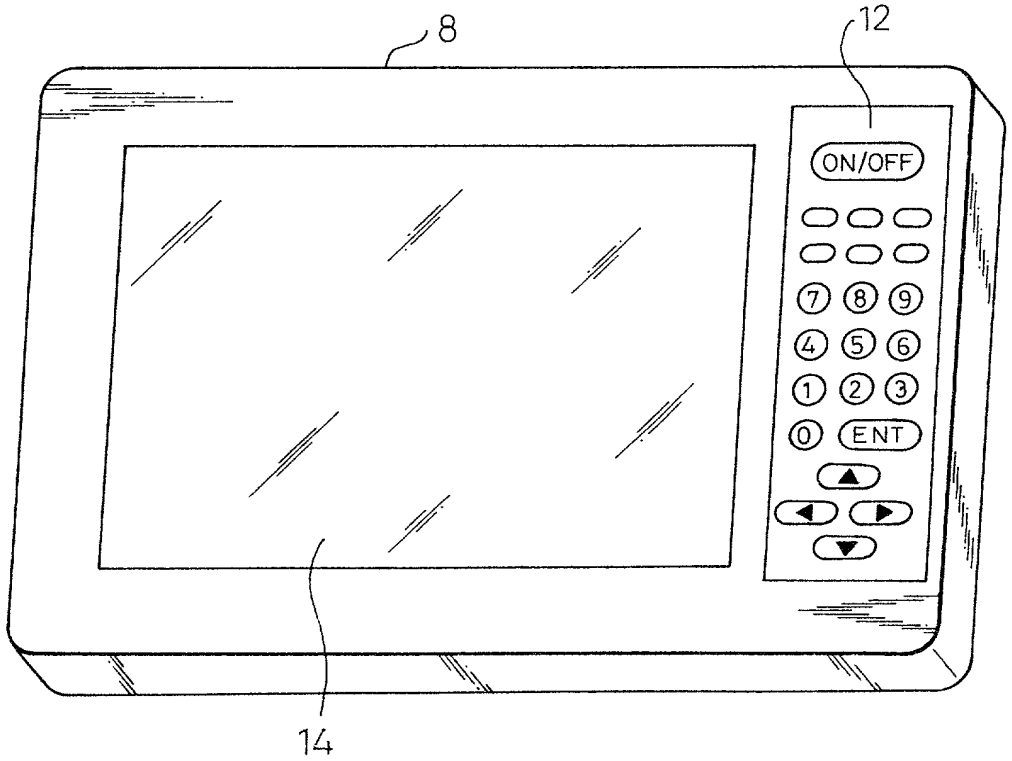

Fig.3

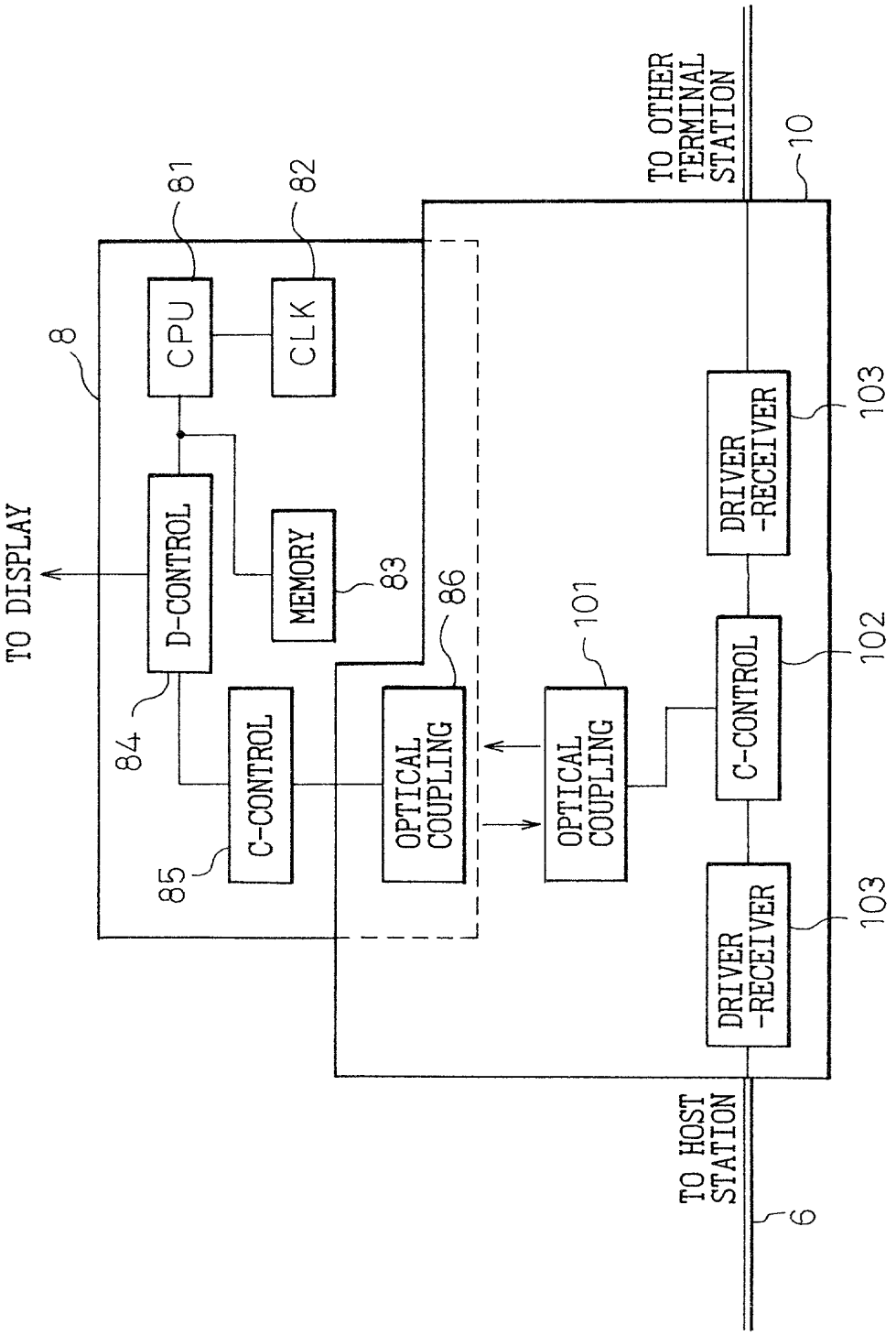
TO DISPLAY
8
CPU
81
CLK
82
D-CONTROL
84
MEMORY
83
C-CONTROL
85
OPTICAL COUPLING
86
OPTICAL COUPLING
101
C-CONTROL
102
DRIVER -RECEIVER
103
DRIVER -RECEIVER
103
TO OTHER TERMINAL STATION
10
TO HOST STATION
6

Fig.4

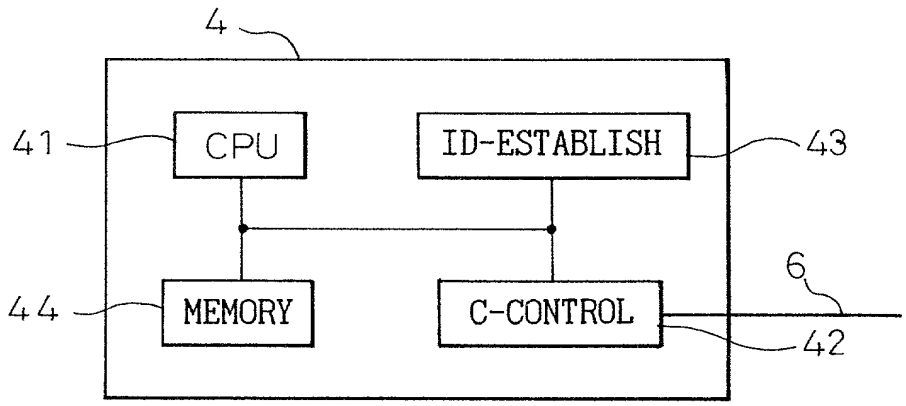
4
41
CPU
ID-ESTABLISH
43
44
MEMORY
C-CONTROL
6
42

Fig.5

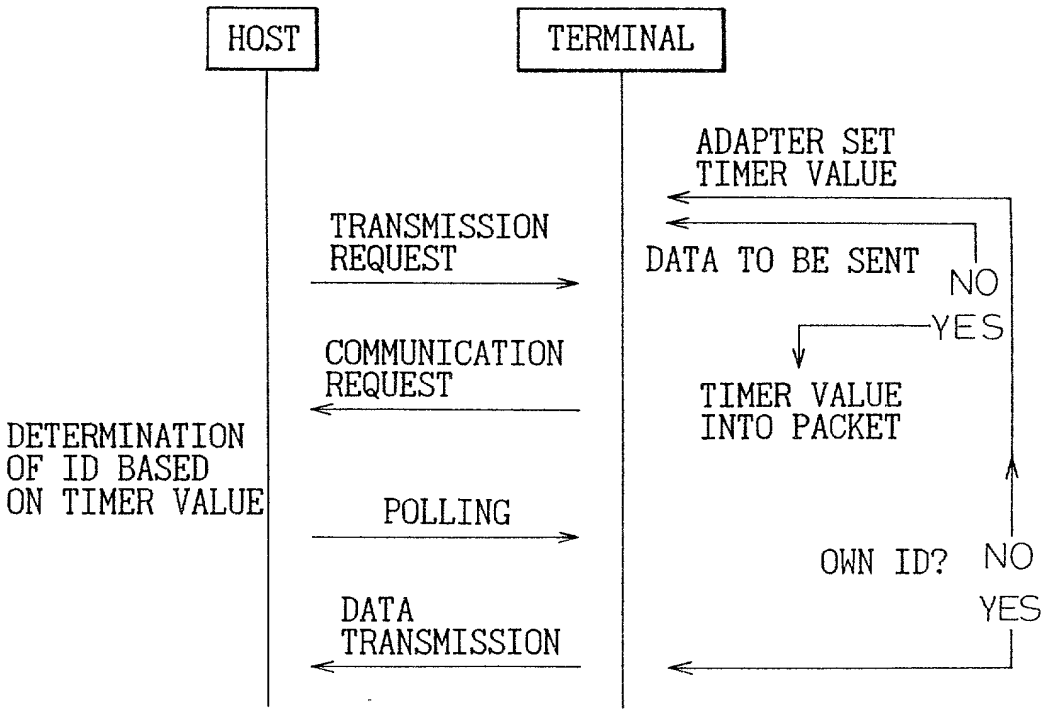
HOST
TERMINAL
ADAPTER SET TIMER VALUE
TRANSMISSION REQUEST
DATA TO BE SENT
NO
YES
COMMUNICATION REQUEST
TIMER VALUE INTO PACKET
DETERMINATION OF ID BASED ON TIMER VALUE
POLLING
OWN ID?
NO
YES
DATA TRANSMISSION

Fig.6

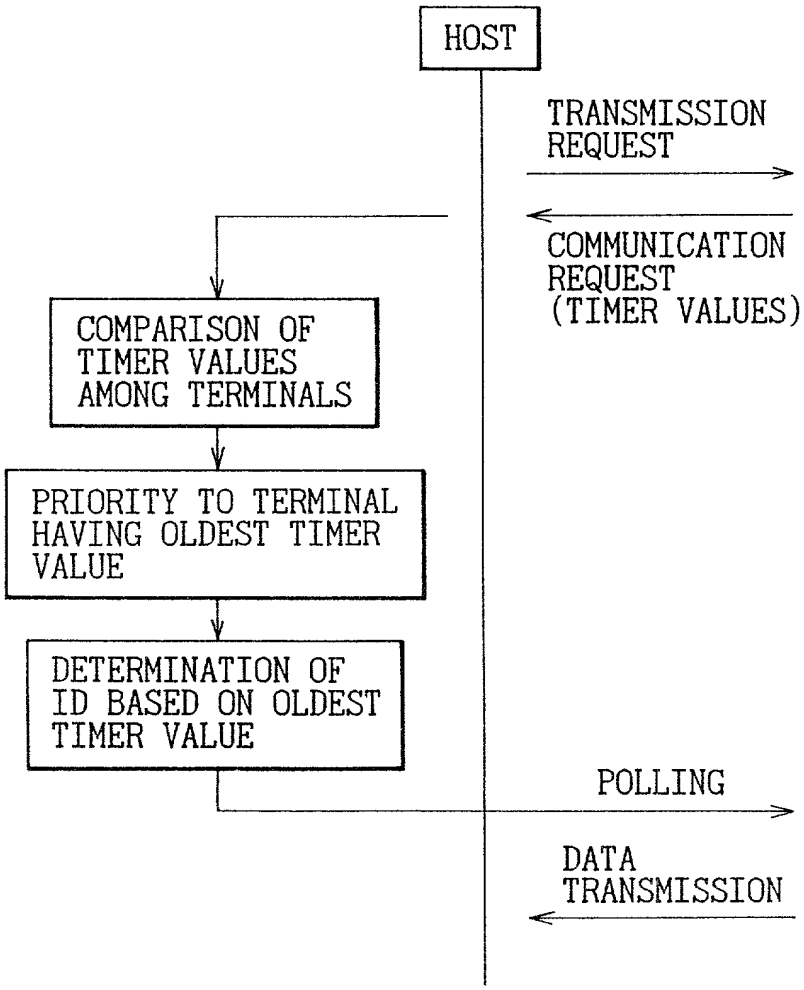
HOST
TRANSMISSION REQUEST
COMMUNICATION REQUEST (TIMER VALUES)
COMPARISON OF TIMER VALUES AMONG TERMINALS
PRIORITY TO TERMINAL HAVING OLDEST TIMER VALUE
DETERMINATION OF ID BASED ON OLDEST TIMER VALUE
POLLING
DATA TRANSMISSION

Fig.7

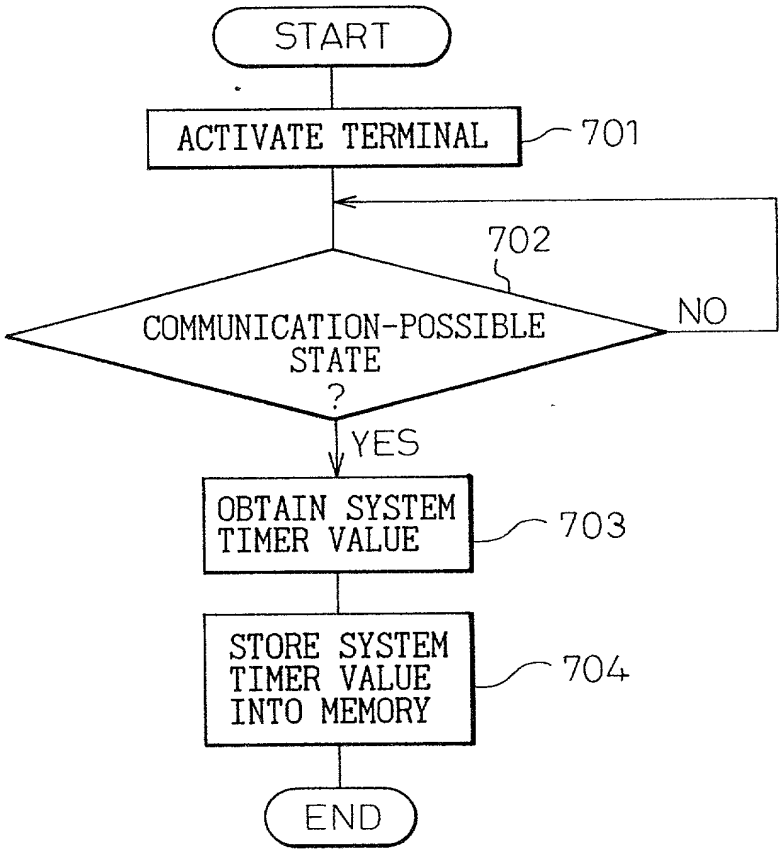
START
ACTIVATE TERMINAL
701
702
COMMUNICATION-POSSIBLE STATE ?
NO
YES
OBTAIN SYSTEM TIMER VALUE
703
STORE SYSTEM TIMER VALUE INTO MEMORY
704
END

Fig.8

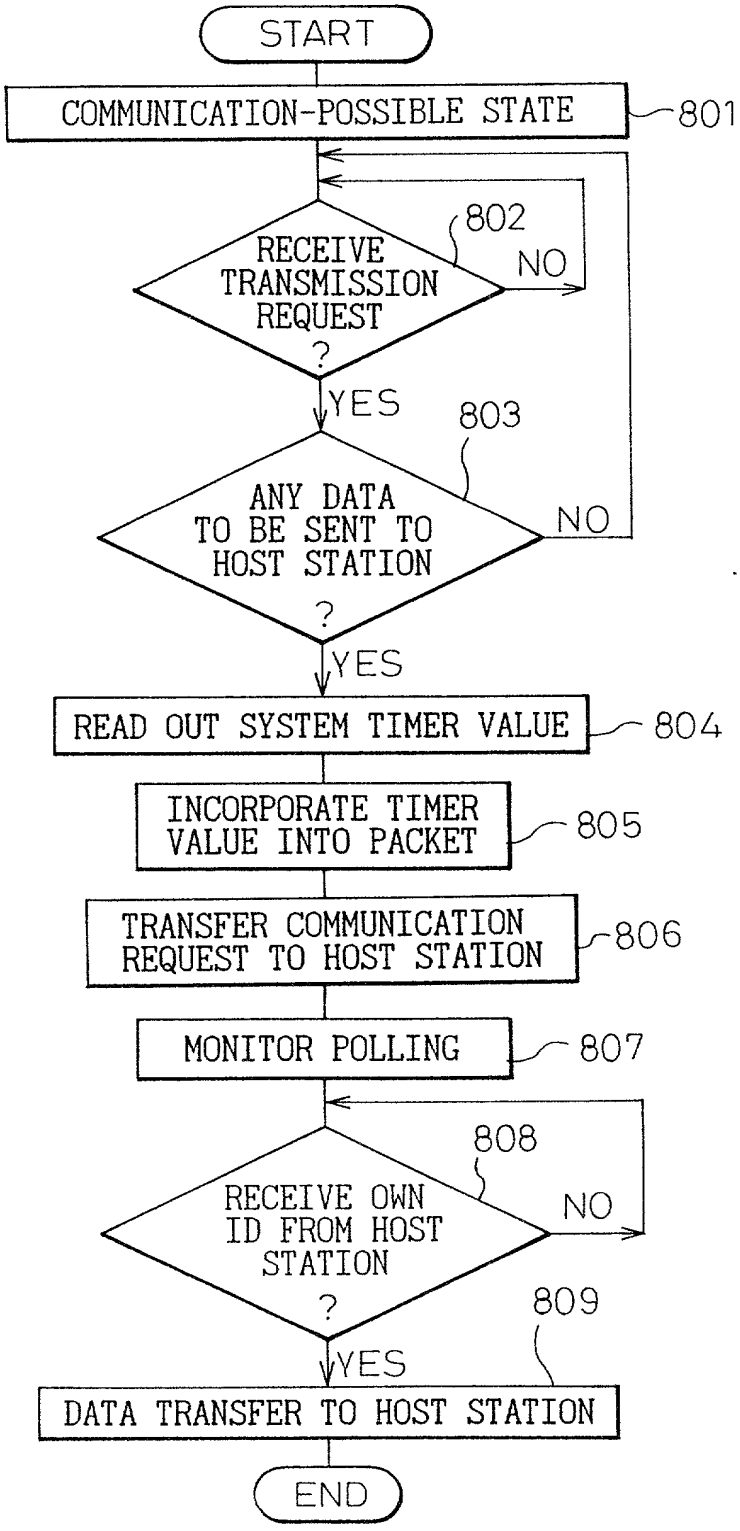
START
COMMUNICATION-POSSIBLE STATE
801
802
RECEIVE TRANSMISSION REQUEST ?
NO
YES
803
ANY DATA TO BE SENT TO HOST STATION ?
NO
YES
READ OUT SYSTEM TIMER VALUE
804
INCORPORATE TIMER VALUE INTO PACKET
805
TRANSFER COMMUNICATION REQUEST TO HOST STATION
806
MONITOR POLLING
807
808
RECEIVE OWN ID FROM HOST STATION ?
NO
YES
809
DATA TRANSFER TO HOST STATION
END

Fig.9

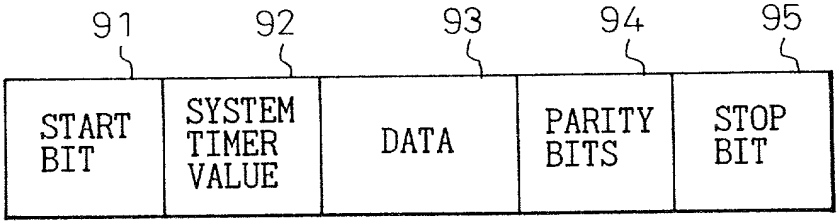
91
92
93
94
95
START BIT
SYSTEM TIMER VALUE
DATA
PARITY BITS
STOP BIT

Fig.10

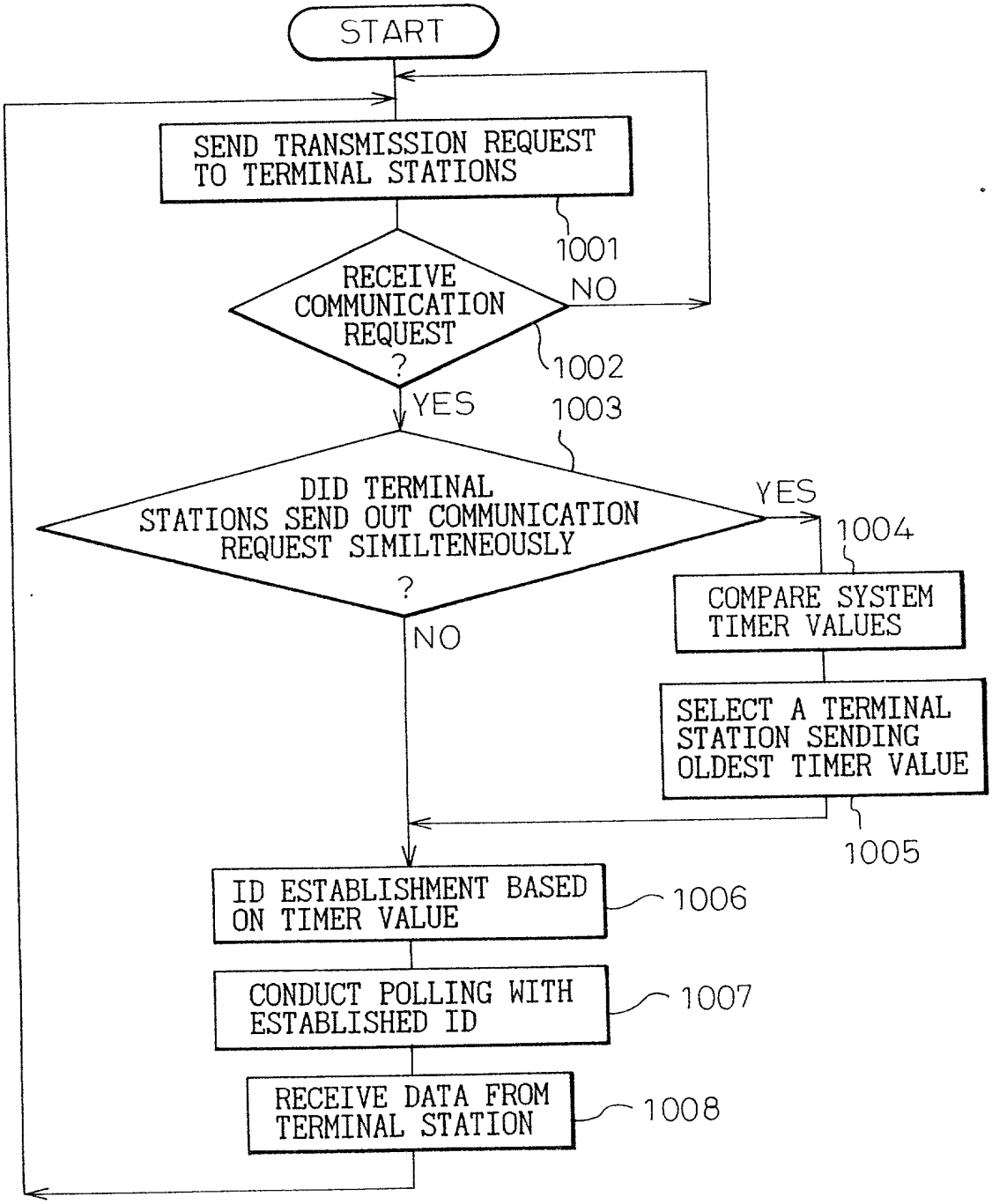
START
SEND TRANSMISSION REQUEST TO TERMINAL STATIONS
1001
RECEIVE COMMUNICATION REQUEST ?
NO
1002
YES
1003
DID TERMINAL STATIONS SEND OUT COMMUNICATION REQUEST SIMILTENEOUSLY ?
YES
1004
COMPARE SYSTEM TIMER VALUES
SELECT A TERMINAL STATION SENDING OLDEST TIMER VALUE
NO
1005
ID ESTABLISHMENT BASED ON TIMER VALUE
1006
CONDUCT POLLING WITH ESTABLISHED ID
1007
RECEIVE DATA FROM TERMINAL STATION
1008

Fig.11

TERMINAL STATION	ID (TIMER VALUE)
2a	○○' ××" △△
2b	△△' ××" ○○
2c	○○' ××" ○○
⋮	⋮
2n	○○' ××" ××